TABLE 1
Area of yellow in crown (in mm^2) of adults of some subspecies of the *Amazona ochrocephala* complex

Subspecies	*n*	Range	Mean
belizensis	4	2264–2546	2460.5
hondurensis	4	492–916	684
caribaea	3	304–502	426
parvipes	8	0–514	160.25
auropalliata (all specimens examined)	14	0–398	128.36
auropalliata (Guatemala)	5	35–398	197.8
auropalliata (Costa Rica)	4	0–142	59
panamensis	2	684–748	716

Notes: Acetate sheets laid over crowns and traced onto. Tracings then laid over 2 mm graph paper and counted. *Belizensis* is the least accurate due to head curvature, and includes the eye region.

of being an immature) and there is only a small amount on the holotype: *c.* 20 mm^2 (2 feathers) closest to Geranium Pink (13) edged with yellow on the right wing and *c.* 39 mm^2 (4 red feathers and 1 yellow) on the left wing. There is more red along the marginal coverts that cannot be seen with the wing folded close to the body. The carpal edge is green, closest to Lime Green (59).

It is commonly known that soft-part colours change with death. The mandibles of the holotype are closest to Cinnamon (39) and darker at the edge and tip of the upper mandible, but were almost certainly far paler in life. The mandibles of LSUMZ 29066 are the duskiest, perhaps due to bleeding at death and/or the possibility that it may be an immature bird. All four specimens have mandibles that are somewhat darker than most *oratrix* museum specimens. Compared to *oratrix* there may perhaps be some subtle colour differences of one or more of the inner layers of the mandibles of *hondurensis* that are not necessarily apparent in life and at least partially account for this. Although the bills of the captive *hondurensis* specimens are all pale, some are a little greyer than others. The cere of the holotype has many blond bristles although the majority are dark. The ceres of the other specimens have blond bristles present in varying quantities. The underlying skin of the ceres is also likely to have darkened in death. The captive specimens show overall cere colour that ranges from extremely pale (like *oratrix*) to more dusky.

General remarks

As mentioned in Lousada & Howell (1996) there is a NW–SE cline evident in the amount of yellow in the different allopatric forms of the *Amazona ochrocephala* complex. By measuring crown patterns from museum skins, Lousada produced Table 1 which quantifies this. Interestingly and recognising the small sample, a similar trend appears to occur on the Pacific coast, with southern *auropalliata* having noticeably less yellow on the forehead than northern birds.

There is one other manifestation of the cline that was not mentioned in Lousada & Howell (1996). The carpal edge (below the bend of the wing) of most Mexican *oratrix* specimens is brilliant yellow, sometimes with a few red and green flecks. This yellow coloration is reduced or absent in *belizensis*.

Captive "*guatemalensis*" showed primarily green to yellowish green carpal edges with just occasional yellow or red flecks, as do the rest of the specimens of the complex.

Although AOU (1983) considered Sula Valley birds to be Yellow-crowned Parrots *A. ochrocephala*, we believe that, given a fuller understanding of the complex situation in northern Central America (Lousada & Howell 1996), *hondurensis* marks the southern end in a cline from Mexican *oratrix* through *belizensis* and "*guatemalensis*"; hence, we have placed it with Yellow-headed Parrot (*A. oratrix* of AOU 1983). It can even be argued, however, that *hondurensis* could be placed with Yellow-naped Parrot (*A. auropalliata* of AOU 1983), *caribaea* being intermediate between *hondurensis* and *parvipes* (Lousada & Howell 1996), or that all of these 'species' should be reunited as a single, polymorphic species, *A. ochrocephala*, as treated by Forshaw (1973).

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Observations on a population of Jerdon's Bushchat *Saxicola jerdoni* in the Mekong channel, Laos

by J. W. Duckworth

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Jerdon's Bushchat *Saxicola jerdoni* ranges west from Vietnam to eastern India (King *et al.* 1975), but there are few recent records and little has been written specifically about it. It is regarded as globally near-threatened (Collar *et al.* 1994). There are several historical records from Laos, all from north of Vientiane (Delacour & Jabouille 1927, Bangs & Van Tyne 1931, Bourret 1943, David-Beaulieu 1944). Between 1950 and 1990, no new bird observations were reported from Laos, and during intensive fieldwork from 1992 to 1995 the species was not found at any of the numerous sites surveyed (Thewlis *et al.* 1996, in prep.), which were, however, mostly to the south of the historical records. In March 1996 a dense population was discovered breeding at the inflow of the Nam Sang river to the Mekong only 60 km upstream of Vientiane. Subsequent observations were made in June and July 1996 at this site. The observations were made during an assessment of the conservation needs of the extensive area of cultivation and degraded forest to the north of Paksang (Duckworth 1996a, b) and relatively little time could be spent at the Mekong.

Study area and methods

The Nam Sang river enters the Mekong at Paksang (18°12′N, 102°09′E; 170 m a.s.l.), where there are a number of sedimentary islands and bars (mainly sands and silts) amid the many extensive rocky outcrops from the river bed. Much of the sedimentary plain, which is exposed in the channel by the lower water levels during the dry season, supports a dense bushland, composed of few woody species, growing to a height of 1–2 m. These bushes are submerged by turbulent water during the season of high flow, from mid-July to mid-October, after which water levels drop progressively; they are lowest during April. There are two main islands: Don Nou, at the mouth of the Nam Sang, and the much larger Don Sadok slightly downstream. Densely vegetated habitat extends 6 km along the river and in places exceeds 1 km in width; the total area estimated (from the Lao Service Geographique d'Etat 1:100,000 maps) is 3–4 sq. km. The habitat on the downstream half of Don Sadok differs from the bushland on Don Nou, being dominated by extensive areas of rank grass and, in places, stands of mature trees.

The area was visited in 1996 as follows: 14 February (12.00–14.00 h); 13 March (08.00–13.00 h); 22 June (06.30–19.00 h); and 15 July (06.30–18.30 h). Observations in February and March were limited to Don Nou. In June (when only half of the land exposed in March was still above water), work was concentrated on Don Nou but a brief boat

trip was made around Don Sadok. In July the entire area of both islands remaining above water (about a tenth of that in March, and broken into many small islets) was surveyed. There was exceptionally little rain in early July 1996 and in many years there is probably negligible suitable habitat above water by mid-July. In both June and July, intensive observations were made on one morning on the dry land adjacent to the Mekong and for 1–2 km up the Nam Sang. This area is composed of rice paddies, dryland cultivation and regenerating scrub over abandoned cultivation amid fragmented and degraded *Lagerstroemia*-dominated mixed deciduous forest.

Estimates of Jerdon's Bushchat density were made in March by standing on four vantage points (all within 1 km of each other) and watching for 10–20 minutes to count the number of males in the viewable area, which itself was estimated as an arc of x° (using a compass) with birds visible for y m (estimated visually; calibration elsewhere indicated that the observer could estimate distances across bushland of up to 500 feet [*c.* 150 m] within 20% accuracy). Visibility varied widely between vantage points and the method was crude because much of each area comprised bare rock, boulders or pools, none of which supported bushchats, and some birds were doubtless overlooked.

Observations

Counts of birds

Males were much more visible than females (in total 38 adult males were seen but only 3 females) and so only males were used for population estimation; this difference in visibility between the sexes was also noted by Stanford & Ticehurst (1938). On 13 March, combined density estimates in the four areas (of 2.5–15 ha) yielded 15 territories in 25 ha. Bushland probably covered a third of these 25 ha. While walking between the vantage points, six further singing males were located incidentally. On 22 June, 13 males were found, mostly on Don Nou, but most suitable habitat on both islands remained unsurveyed. On 15 July a thorough survey of all islands found only four males, which probably represented at least half the males in the area.

Most observations were made in the bushland, especially of Don Nou. There was not time to survey Don Sadok in March, but a male was seen from a boat in the extensive grass at the downstream end of this island in June, as well as several in the bushland of Don Sadok in June and July. No bushchats were seen in the extensive areas of trees, bare rock or sediment on the islands, up the Nam Sang river, or in the dryland habitats adjacent to the Mekong channel.

Breeding cycle

Most males observed in March were singing from sprays of vegetation projecting above the general level of the bushland, but they also perched for long periods in such positions without singing. They frequently dived to the base of an adjacent bush after a song bout. The

morning of observations was largely cloudy and song continued intermittently at high levels throughout the visit. The closest separation observed between males in March was 30 m. In June and July, no singing was heard and, in June, two males were seen perched for many minutes only 6 m apart without showing aggression; territorial behaviour seemed negligible, but the males still spent long periods (many minutes) perched prominently atop projecting twigs and grasses. A juvenile male with a full-grown tail was seen with a female on 22 June.

Vocalisations

The song, which, with that of Yellow-bellied Prinia *Prinia flaviventris*, was the predominant bird sound coming from the bushland in March, was a thin warble such as might be produced by a *Sylvia* warbler, but lacking any harsh or churring notes. The most frequent call was a plaintive, loud, single-note *heeeeew*; a single-note swearing rasp was occasionally given.

Discussion

Population and status in the island complex

The territorial population on the islands in the Paksang area in 1996 probably exceeded 100 pairs. The bushland occupied by the birds occurs in a fine mosaic with open sediment, rocks and water; this figure is calculated on the basis of three pairs per 5 ha of mosaic habitat (as above) of which there is at least 200 ha. If grassy areas of Don Sadok were also occupied, the total population might have reached 200 pairs.

No bushchats were found in the special searches during June and July of the cultivation and scrub adjacent to the Mekong, nor were any seen in extensive surveys during February–March and June–July of such habitats over the area for 40 km to the north. The vegetation of some abandoned fields was of similar superficial physiognomy to the Mekong channel bushland, although the two habitats were composed of different plant species and the latter is a natural habitat while the former is a secondary regrowth in an area which was initially forested. A similar restriction, in that case of several species, to the vegetation of seasonally-inundated islands, with absence from adjacent dryland scrub, was also found in Amazonia by Rosenberg (1990) and Tye (1995). Both authors suggest that the distribution of the birds in question is restricted more by vegetation characteristics than by insularity *per se*; it is not possible to tell the relative importance of the two in determining Jerdon's Bushchat distribution at Paksang as no natural bushland was found away from islands.

During the months of highest flow, the Mekong inundates all habitat suitable for Jerdon's Bushchat. The bushes are completely underwater, but it is this annual submersion that retains the vegetation as bushland. Most bushchats had left the channel by July, some probably by late June. It is not yet possible to suggest where the birds go when the Mekong is high, but the absence of observations in dry land vegetation at Paksang means that it is unlikely that they simply move from the

channel into the adjacent vegetation, unless they change completely in behaviour and become highly skulking. In the context of observations elsewhere, and the low sighting rate of females on the islands, this latter is more possible that it might seem. Before extensive human modification to the environment, the bushchats would have gone to some natural habitat when the Mekong was high, and it is perhaps most likely that they still go there. It may be another form of natural bushland, as the allied Whinchat *Saxicola rubetra*, when making short-term stops on migration over lowland England, selects from the available hedgerows and scrub those which are most similar to its breeding habitat (Duckworth 1994).

The lack of observations of the species on the February visit is of no significance as the two midday hours spent in the area were devoted to searching for waders and hirundines.

Bird community of the Mekong channel at Paksang

The distinct bird community in the Mekong channel at Paksang was typical of such a specialised island habitat with structurally simple vegetation: it had few species but a relatively high proportion were abundant, while some were rare or scarce elsewhere in the region. The bushland held high densities of Jerdon's Bushchat, Plaintive Cuckoo *Cacomantis merulinus*, Greater Coucal *Centropus sinensis*, Streak-eared Bulbul *Pycnonotus blanfordi*, Oriental Magpie Robin *Copsychus saularis*, Common Tailorbird *Orthotomus sutorius*, Plain Prinia *Prinia inornata* and Yellow-bellied Prinia, with lower numbers of Blue-tailed Bee-eater *Merops philippinus*, Pied Bushchat *Saxicola caprata*, Bright-capped Cisticola *Cisticola exilis* and a few others. Like Jerdon's Bushchat, the bulbul, bee-eater, Pied Bushchat, cisticola and both prinia species were extremely localised or unrecorded in the adjacent dry-land mosaic of cultivation, scrub and relict forest. Conversely, Grey-breasted Prinia *Prinia hodgsonii*, Stripe-throated Bulbul *Pycnonotus finlaysoni* (and various other species) abounded up to the riverbank but were rare and unrecorded, respectively, in the channel.

Some hillocks in the channel are always above water, except for flash floods, and their trees supported a depauperate derivative of the bird community of the adjacent land, including visits by Pompadour Green Pigeon *Treron pompadora* (at risk in Thailand and Laos; Treesucon & Round 1990, Thewlis *et al.* in prep.). Rocky outcrops within the channel hosted Wire-tailed Swallows *Hirundo smithii*, and the earth cliffs Plain Martins *Riparia paludicola*; both probably bred and in July over 300 of the former and over 100 of the latter were observed. These are the largest numbers seen in Laos in recent years of both species, which are at risk in Thailand and have declined in Laos (Treesucon & Round 1990, Thewlis *et al.* in prep.). Sandbanks, open mud and pools held ducks, wagtails, Paddyfield Pipit *Anthus rufulus* and waders (migrant and resident), and notably small numbers of River Lapwing *Vanellus duvaucelii* which has declined in Laos (Duckworth *et al.* in press) and Small Pratincole *Glareola lactea*, which is at risk in Thailand (Treesucon & Round 1990).

Comparison with other records of Jerdon's Bushchat

These are the first records from Laos of Jerdon's Bushchat for over 50 years. The species is poorly known and previous information, from throughout its range, concerning habitat use has been conflicting. This section aims to summarise all published information about the species relevant to its population, distribution and habitat use.

In Indochina, Jerdon's Bushchat was considered to be a rare and localised resident on several high plateaux (Delacour & Jabouille 1931). In Laos, it was a common resident above 1400 m in Tranninh, particularly at Ban Nonghet, a high valley (1500 m) dominated by rocks and tall herbs in place of the original forest and subject to frequent fires, frosts and fog (Delacour & Jabouille 1927, David-Beaulieu 1944). A specimen from Phou Khoum, a deforested mountain at 1600 m on the border of the provinces of Louangphabang and Tranninh, and lacking in ornithological interest (David-Beaulieu 1944), was received by Bourret (1943). A breeding female was taken on 12 May 1929 at Ban Muangyo in the far north of Laos at 2300 ft (750 m), an area of rice fields surrounded by good forest (Bangs & Van Tyne 1931).

The only other recent Lao record is of a male on 1 April 1996 in low bushes on a Mekong island 2 km downstream of the mouth of the Nam Ou (W. G. Robichaud verbally 1996). No Jerdon's Bushchats were found during frequent observation in 1992–1996 on Don Chuan, a large island in the Mekong in Vientiane (Thewlis *et al.* 1996, in prep.), which however lacks the bushland of the Paksang region, nor were any seen on a 2–3 hour search, specifically for the species, of an extensive area of sand with patches of bushland around Thadua (25 km downstream of Vientiane) on 10 April 1996 (R. J. Tizard & R. J. Timmins verbally 1996); the species is so conspicuous that, if it is present, one may be certain of locating males during breeding season observations of river channel bushland (Stanford & Ticehurst 1938 also felt a similar certainty about seeing birds in this habitat).

There are very few records from Vietnam: Kuroda (1917) and Delacour (1930) listed the species from Tonkin, at Lao Kay and Pakha respectively. Both are hilly areas, the latter being a quite deforested area at 4000 ft (1300 m).

In Thailand, the species occurs only in the north, is very scarce and inhabits the tall grass of riverine floodplains; populations have been reduced by drainage and clearance, especially the burning of reedbeds for agriculture (Round 1988); Round (1983) specifies three sites. J. N. Dymond (*in litt.* 1996) observed the species at Chiang Saen in northern Thailand where small numbers of birds (maximum 3) were found in a narrow belt of tall riverside grass containing a few thorny bushes which the chats used as perches. All his observations were in January–February and the species was very skulking; no calls or song were heard.

Only in Burma has occupation of river-island scrub been described previously: in the north bushchats were found with certainty where wild roses (called *Rosa bracteata* in Smythies 1986) grew on the sandy islands of the larger river valleys, including at Sinho (where it was probably breeding in May) and on the western edge of the Indawygi

lake (Stanford & Ticehurst 1938). In Bhamo it bred in long grass and briars in the Irrawaddy valley in April–May (Harington 1905, 1909). Otherwise, its status in the country caused some controversy: Stanford & Ticehurst (1938) felt that the species occurred only in vast grass plains at low altitudes and disagreed with a former statement that it was a hill bird. Blanford (1870) found it in elephant-grass in the Irrawaddy valley, and Wickham (1929) found it only in this valley, in the northern part of the country. Oates (1883) considered that although probably resident, it was extremely rare in Burma, quoting only Blanford's (1870) record and some from Bhamo. Stanford & Ticehurst (1935) shot only one in lower Burma in over three years, in *kaing* grass in Leikchuang, and agreed with Oates's assessment of it as extremely rare in that part of Burma. Up to nine were recorded on three January–February visits in 1973–1982 to the reeds around Inle Lake (King 1983). Birds are still common (at least 10 males were seen in one day) at this lake, in 3–4 m high reeds at the lake's edge and in the huge floating mass of reeds on the lake itself; birds were observed feeding in areas of aquatic crops and floating vegetable gardens amid this mass (F. R. Lambert *in litt.* 1996).

In India it was: common all over the Brahmaputra basin in thick vegetation (particularly grass hedges) along streams or wet ditches, and one of the commonest birds in Manipur, including the suburbs of the capital Imphal, but it was never seen in the hills (Hume 1888); very common in North Cachar in cold weather, with a few remaining to breed on the higher hills (Baker 1894–1901); a common resident in the Khasia hills, and common on the adjacent plains in cold weather, but ascending above 3000 ft (900 m) in the breeding season (presumably about March) (Baker 1907); resident in parts of Upper Assam, occurring throughout the plains in the cold season (October to February) and confined to reed and grass adjacent to rivers (Stevens 1914–1915); an abundant breeder (laying eggs in April–May) in vast plains of sun grass on the north bank of the Brahmaputra in Lakhimpur district, and occurring at the base of the foothills in this district, in smaller numbers west to the grass plains of North Kamrup district, and also in the upland grass plains of the Chin hills (Baker 1924). Baker's (1933) summary of its status in India (which was not added to by Ali & Ripley 1973) recorded it from vast expanses of various tall grasses in the plains at the base of the Himalayas, extending into upland grass plains and foothills up to 2500 ft (700 m). It was particularly common in Assam in many places in Sibsagar and North Lakhimpur, where it bred in February–April in grasslands and grassy sandbanks in rivers that were flooded towards the end of that month by Himalayan meltwater.

There are very few recent records for the Indian subcontinent, where most areas of long grass in the wet lowlands, from which the majority of records listed above come, have been modified for cultivation (T. P. Inskipp verbally 1996). Choudhury (in press) recorded singles (over several years) each in November, March and May, in grass and reed along river or channel banks in the Dibru-Saikhawa Wildlife Sanctuary, Assam. This area is on the Brahmaputra plains just

north-east of the area where Stevens (1914–1915) had previously recorded it regularly. There are only few records from Kaziranga National Park, Assam, an area of extensive grassland which seems, from previous descriptions of habitat occupied by the species in Assam and Burma, to be ideal for the species (T. P. Inskipp verbally 1996).

There are only three recent published records from Bangladesh, all from tea estates or grassland in the northeast in December–February (Thompson *et al.* 1993); the only previous records from the country cited in this source (from Godwin-Austen 1870) give no information on status or habitat use.

The only records from Nepal appear to be from the Kosi barrage in the east in May–June 1975–1976 (Inskipp & Inskipp 1991) and a few in the early 1990s from the west of the country (N. J. Collar verbally 1996); all were in extensive grassland.

There are few records from Yunnan: a male along the Namting river in February 1917 (Rothschild 1926), four specimens collected in Luxi and Gengma counties in the 1960s and a few sightings in Menglun, Xishuangbanna, in April 1994 during a two month survey (Han Lianxian *in litt.* 1996). The latter birds were all within 100 m of rivers.

In summary, although the records from the Mekong channel at Paksang are in a different habitat from the deforested hills in which it was previously recorded in Laos, records outside Indochina come mainly from lowland grass and scrub, usually close to water. The most frequently noted vegetation, extensive tall floodplain grassland, is rare or perhaps absent from the Mekong in north-central Laos. It might be that the bushchats at Paksang are inhabiting a sub-optimal area, following loss of a more favoured grassland (J. C. Eames *in litt.* 1996); however, if this were true it is unlikely that the density on the islands would be so high, or that the bird would be so localised to one habitat. Furthermore, occurrence in both lowland river valley scrub and higher-altitude hill scrub has previously been documented only in Burma. In some areas of India and Burma, the bird was found at low altitudes only in winter, with several authors noting a move to higher altitudes to breed, although the most comprehensive summary referred to breeding in seasonally flooded areas, as is Paksang. In general the bird's occurrence seemed to be patchy, with areas of local abundance amid extensive areas where the bird was scarce.

Threats to, and conservation needs of, the species in Laos

In contrast to forest, direct human exploitation of the island vegetation does not currently pose a threat to the habitat. It currently supports low levels of stock grazing and a major increase in this might affect the vegetation structure and in turn the bushchats. Salad and melons are grown during the dry season on the areas of extensive open sediment not used by the bushchats. Currently only a small proportion of the area suitable for gardens is used as such and no bushland is cleared for this purpose. The shrub *Mimosa pudica*, which thrives in disturbed areas, has taken over huge areas of lowland northern

Thailand (P. D. Round *in litt.* 1996). Although it has not colonised the Paksang islands, if their natural vegetation were to be cleared or overgrazed for any of the above reasons, regrowth might involve this invasive species, whose suitability for Jerdon's Bushchat is not known.

The heavy use of the area for fishing results in high levels of disturbance which are detrimental for River Lapwings (Duckworth *et al.* in press) but are unlikely to affect the bushchats, which seemed unconcerned by observers even within 10 m. Most small boys in Laos habitually kill birds with catapults and the habit of Jerdon's Bushchats of perching prominently on low vegetation makes them an easy potential target; but as the bushland can be reached only by boat, the threat from boys is negligible.

Potential threats which are more serious come from changes in the sediment flow dynamics of the Mekong as the bushland grows upon river-borne sediment. If substantial quantities of sediment are removed from the river, or trapped by barriers, water with an unnaturally low sediment load will wash away, without replenishment, downstream sand and silt deposits (Brooker 1981). If this were to happen upstream of Paksang, it would result in the reduction or even loss of vegetation. Intensive extraction of sediment during the dry season from the Mekong in Vientiane since 1994 has caused a major shrinkage of Don Chuan, a large island formerly supporting extensive vegetation. During 1996, similar heavy extraction was observed upstream of Vientiane halfway to Paksang. It is not clear if the sustainability of this practice, which was initiated only in the last few years, has been considered by those engaged in it, and it may be that as deposits close to Vientiane become depleted, extraction sites will move upstream. The suitability of the Paksang region for bushchats (the sediment of much of which, especially the areas supporting bushland, is too interspersed with rocky outcrops to make extraction financially viable from the site itself) would be reduced if substantial extraction were to occur upstream of it.

A further potential threat is the proposed chain of cross-Mekong hydropower dams which, if built, would disrupt seriously the ecology of the entire basin (Roberts 1995), probably including the sediment flow, as each dam traps sediment in its headpond.

The urgency for conservation action for this species is thus lower than for forest birds (see Thewlis *et al.* in prep.) and its precise level is difficult to assess because of the paucity of information on the bird in Laos, as elsewhere in its range. Further survey is thus the highest priority action. Visits to Paksang are needed to clarify the extent of occupied habitat, the population and the seasonal status of Jerdon's Bushchats there between August and February. The extent of occupied habitat along the rest of the Mekong and its major tributaries in Laos should be investigated. The areas and habitats used by the birds from Paksang during the peak of the wet season need to be established; they may have been modified or reduced by human activity. The montane areas of secondary grassland used by the birds in Tranninh (now Xieng Khouang province) need to be revisited and the bird's current status there assessed.

Summary

A dense population of the globally near-threatened and little-known Jerdon's Bushchat *Saxicola jerdoni* (totalling 100–200 pairs over 6 sq. km) was discovered in March 1996 breeding amongst a complex of scrub dominated islands in the Mekong channel at Paksang, 60 km upstream of Vientiane. Small numbers of birds were still present in mid July when most of the breeding area had been submerged by the seasonally rising river water. The remainder of the birds could not be located on the adjacent dry land and appear to disperse out of the area. This habitat differs greatly from that recorded in Laos during the only previous observations, made during 1925–1945, but such breeding habitat has been described previously in Burma. The species is probably under no imminent threat at the site unless the rapidly expanding practice of removing sediment from the channel during the dry season extends upstream of the site. Further surveys are urged, both in the Mekong and its major tributaries, and in the montane scrub in the north of Laos which was previously reported to hold the species. These are particularly important in view of the paucity of recent records from elsewhere in the species' range.

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